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ABSTRACT

The paper, originally given at a 1986 Ethnic and Multicultural Symposium, emphasizes the need for schools to recognize and understand the impact of culture on student academic and social success. Classroom based assessment and evaluation strategies for use with culturally diverse, behaviorally disordered students are reviewed and discussed. An interventionist approach to assessment and evaluation is suggested to reduce biases and improve educational decision making. It is recommended that psychometrically based, indirect assessment procedures be replaced by curriculum-based practices that focus on the educational process rather than on student performance alone. A prereferral approach to problem identification is offered. Discussion of direct observation assessment methods includes functional analysis, empirical and social validation, communicative function of behavior, and behavioral forms and critical effects. (DB)

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Educational Assessment of the Culturally Diverse and Behavior Disordered Student: An Examination of Critical Effect

George Sugai

The Education for All Handicapped Children Act (P.L. 94–142, 1975) is one of public education's most important pieces of legislation. It has occasioned significant changes in how handicapped children and youth are perceived and served in America's schools. As a result, special education programs have become commonplace in most public school buildings. The effect of these changes on the roles and responsibilities of special education, however, have been debated actively in recent months (Lily, 1986; Wang, Reynolds, & Walberg, 1986; Will, 1986). Madeleine Will, Assistant Secretary for the Office of Special Education and Rehabilitative Services, has delineated a number of challenges that face special educators in the next decade. They include the following:

1. The categorical nature of special education programs reinforces a presumption that students with learning problems cannot be taught in regular education settings.
2. The diverse number of special education programs has made it difficult to define how special and regular education are different and to determine who should receive what services.
3. Special education programs tend to focus on learning problems which in turn cause students to perceive themselves as inadequate and incompetent.
4. Categorical special education programs tend to limit services for handicapped students to those services associated with the handicapping category. As a result students are underserved.

These problems are particularly apparent when working with students who display behavior problems. Seriously emotionally disturbed or behaviorally disordered (BD) students represent one of the special education's most un- and underserved handicapped populations (Grosenick & Huntze, 1980; Kauffman, 1985). The BD student is more likely to be removed from the mainstream and to be placed in more restrictive settings than students with less intrusive handicaps. According to findings reported in the Eighth Annual Report to Congress on the Implementation of the Education of the Handicapped Act (U.S. Department of Education, 1986), 68% of all handicapped students in the United States were served in regular classroom settings, 25% in separate classes, and 7% in separate schools or other settings. In contrast, 44% of behaviorally disordered students were educated in regular classroom settings, 37% in separate classes, and 19% in separate schools or other settings.

Since 1977, when 3,704,915 special education students were served, there has been a 17.6% increase in the number of students receiving special education services (in 1984–1985, 4,363,031 students were served). In contrast, the number of BD students has increased 32%

EC 210 640

(283,072 to 373,207), the highest categorical increase except in the learning disabilities area (131%). Despite these increases, the percent of identified BD students in the total school age population (3–21 years of age) is 0.5%. A survey of state directors of special education (Schultz, Hirshoren, Manton, & Henderson, 1971) indicated prevalence estimates that ranged from 0.5% to 15%. Kauffman (1985) suggested that a reasonable estimate should be 6%–10%. Using a very conservative figure of 2%, special education programs might be serving 1,373,880 BD students. This discrepancy between the actual and expected number of BD students suggests that a significant number of students are not being served in special education. A further inference is that many students with emotional or behavioral problems are being served effectively (or ineffectively) in general education settings.

These service delivery and identification problems are further confounded by cultural diversity. In different regions of the country, some culturally different students are overrepresented in special education programs for behavior disordered students (e.g., Black, Hispanic), while other groups are underrepresented (e.g., Asian). New immigrant populations from Pacific rim countries pose even greater problems to schools that are based on more traditional majority curricula and practices.

The purpose of this chapter is to review and describe classroom-based assessment and evaluation strategies that can be used when working with culturally diverse, BD students. In describing these strategies a context for educating culturally different, BD students is developed. Guidelines for making sound educational decisions within the context of cultural diversity and behavioral deviance are also presented. An interventionist approach to assessment and evaluation is recommended.

FIRST ORDER CHANGE

This discussion is based on the premise of first order change, or change at the behavior and classroom levels. Second order, or system level change, is not discussed directly because solutions involve complex political, legislative, and attitudinal modifications beyond the scope of this chapter.

First order change emphasizes the role of classroom teachers and acknowledges their ability to make accurate diagnoses about student performance. Gerber and Semmel (1984) recommended that teacher suspicions should not be viewed as a call for validation "testing" but as a valid test in and of themselves. Teacher identification is based directly on the working characteristics of the classroom, that is, nature of instruction, classroom economics, behavior management, student performance, etc. They also indicated that it is inappropriate, misguided, and potentially harmful to base identification of handicapped students on psychometric measurement. This norm-referenced approach enables teachers to divorce themselves from ownership of an instructional problem. The school's failure to tolerate and accommodate individual differences frequently shapes a student's handicaps, not deviations based on psychometric measurements or cultural, learning, or behavioral differences.

FOUNDATIONS

Before beginning this discussion on assessment and evaluation practices with culturally different, behavior disordered students, some basic questions should be discussed.

What Is a Minority?

Many definitions have been used to describe a "minority." For the purposes of this discussion, a definition by Brantliner and Guskin (1985) will be utilized. Based on their definition, a minority individual has three basic characteristics: (a) "politically excluded from proportionate roles and responsibilities in the major institutions of power" (p. 1), (b) "receive less than their share of goods, services, values, rewards, power, prestige, and prerogatives" (p. 1), and (c)

perceived by the dominant institutions as "deviant, difficult, inferior, or wrong" (p. 1) (or somewhat more positively, different or interesting).

What is Competence?

"Competence" does not equal dominance, but equals power, skill, knowledge, and ability to cause change. Power in this case refers to the ability to engage in objective and functional decision making that results in an increase in the individual's ability to achieve proactive change, that is, to access the goods, resources, services, etc. of the dominant society.

What is the Role of Language in Student Learning?

Language is a major factor contributing to a student's success (or failure) in U.S. public school classrooms. A student's language system represents the vehicle by which culture, knowledge, and competence are communicated within and between cultures.

> Language is unique in its dual role as an intrinsic component of culture and as a medium through which other aspects of culture, including the content of formal education, are expressed and transmitted. Language is an intricate part of selfhood, and the way others respond to it affects the child's self-concept and feelings towards self. (Brantlinger & Guskin, 1985, p. 7)

HOW DOES CULTURE AFFECT STUDENT BEHAVIOR?

The relationship between culture and student behavior or performance can be described in a simple six-component configuration (see Figure 1). In general, a family's cultural beliefs reflect the values and standards of the larger culture within which the family exists. These cultural beliefs have a strong influence on the values incorporated into the basic family unit. This set of culturally based values, in turn, affects child management practices used by family members within the home. Childrearing practices influence the child's academic, social/emotional, and behavioral development and how he or she responds to the demands and expectations of the school and community. When cultural beliefs are diverse or in conflict with the dominant community or school environment, social development and educational opportunities are affected. The existence of a handicapping condition, especially a learning or behavioral problem, influences the student's movement through the six components.

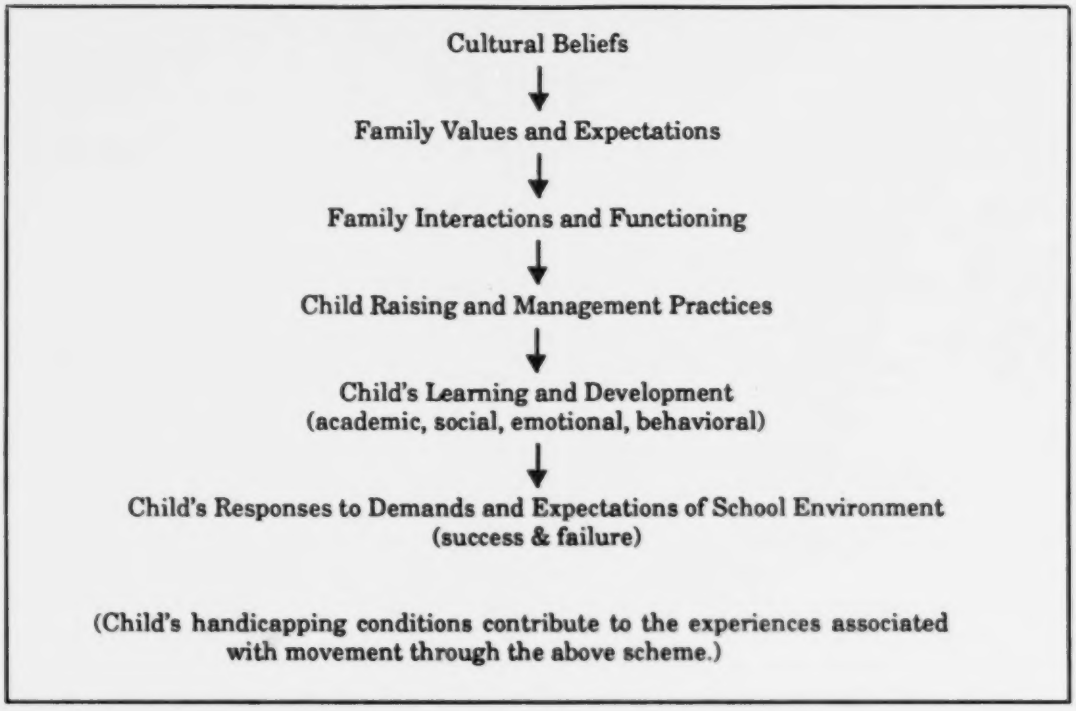
What Factors Determine Behavioral Normalcy/Deviancy?

Determining how a student's culture interacts with the school culture and when a student is behaviorally disordered is very difficult. Such decisions tend to be based on norm-referenced standards that are setting or culturally referenced. This condition can be described in a four-component structure that organizes the major factors that contribute to determinations of normalcy and deviancy (see Figure 2). Predisposing factors consist of those conditions which predispose or make a student susceptible to exhibiting a set or class of behaviors. These conditions are frequently biologically or genetically based (e.g., physical attributes, race) or described in more covert terms (e.g., emotions, thoughts, feelings). Behaviors consist of those language and action events that students (or teachers) emit to operate or act on the environment. We use student behaviors to make inferences and decisions about the student.

The third component of this structure includes those precipitating factors or antecedent conditions that trigger a class of behaviors. Events and objects in the social or instructional settings are included—for example, setting contexts, rules, norms, expectations, attitudes, curricula, etc. Precipitating factors that impinge upon a student's learning are biased by the predisposing characteristics of the teacher and school climate. The fourth component consists of contributing factors which are consequence conditions that become associated with a given class of behaviors. They include events and objects in the social environment that immediately

FIGURE 1

The Relationship Between Culture and Student Behavior


Cultural Beliefs
Family Values and Expectations
Family Interactions and Functioning
Child Raising and Management Practices
Child's Learning and Development
(academic, social, emotional, behavioral)
Child's Responses to Demands and Expectations of School Environment
(success & failure)
(Child's handicapping conditions contribute to the experiences associated with movement through the above scheme.)

follow a student's learning or responses, for example, social reactions, reinforcement, punishment.

When assessing the learning and behavioral characteristics of the culturally different student, all behaviors and predisposing, precipitating, and contributing factors from the school, community, and home settings should be considered. Kauffman (1985) has described five basic school-based contributions to determinations of deviancy: (a) "insensitivity to children's individuality"—failure to acknowledge a student's expressions of individuality which are predisposed by culture and learning history; (b) "inappropriate expectations"—self-fulfilling prophecies held by teachers and school building staff; (c) "inconsistent management"—unequal treatment across individual students and discrepant behavior and classroom management; (d) "instruction in nonfunctional and irrelevant skills"—failure to engage students in learning and creating artificial reasons for learning; (e) "nefarious contingencies of reinforcement"—inconsistent use of reinforcement and feedback for both appropriate and inappropriate behaviors; and (f) "undesirable models"—inappropriate behaviors modeled by peers and adults.

The outcomes associated with a failure to consider predisposing, precipitating, and contributing factors and failure to change school contributions to deviancy can be dramatic for the culturally different student. Four outcomes can be delineated (Chinn & McCormick, 1986). First, minority children are expected to have higher incidences of handicaps than other groups. Second, minority children are judged as less competent than their peers. Third, disproportionate and erroneous numbers of minority children are referred for special education evaluation. Fourth, teachers tend to refer children who bother them. In some cases migrant and immigrant children tend to be referred sooner than other children, frequently before they

FIGURE 2

A Four-Component Structure that Organizes the Factors Contributing to Normalcy and Deviancy

Precipitating Factors	*Predisposing Factors*	*Behaviors*	*Contributing Factors*
Events and objects in the social environment; setting contexts, rules, norms, expectations	Biologic make-up, genetic endowment; physical attributes; cultural experiences, values, and norms; behavior repertoire; emotions, thoughts, and feelings	Language and actions	Events and objects in the environment: effects, reactions, products

have had the opportunity to adjust to the new demands and expectations of a new system. In all these outcomes, the problem is a conflict between the teacher and student (and family) as to what constitutes acceptable behavior.

APPLIED PROBLEM

The goals of regular and special education are clear: (a) to assess and evaluate student learning; (b) to prepare students for the less restrictive learning environment; (c) to prepare students for community living; and (d) to increase students' opportunities for academic and social success. However, when working with students with divergent learning or behavioral histories, special educators must combat the effects of time, which is the applied problem (see Figure 3). As discrepancies between special pupils and their peers increase over time, opportunities for academic and social success are reduced. Without extremely powerful interventions, the kind and number of interfering or nonfunctional behaviors increase over time. The applied problem is further compounded when working with students from culturally different backgrounds whose behaviors are perceived as deviant.

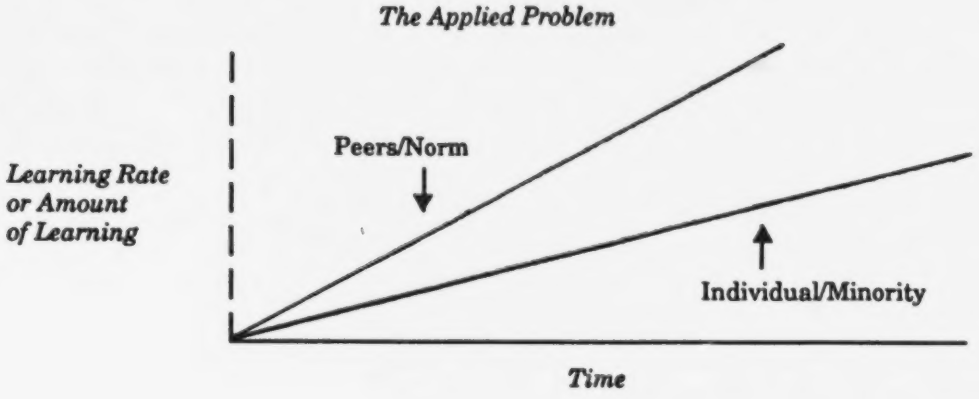
The applied problem can be characterized as follows: (a) failure to acknowledge the classroom teacher as a "perfect test", (b) failure to accommodate individual differences in teaching and social interactions, (c) failure to examine the full range of factors that contribute to student performance, (d) tendency to separate assessment and evaluation practices from instruction, (e) tendency to view culturally different students as deviant and less competent than their dominant culture peers, and (f) failure to evaluate the effect of individual biases and values on educational decision making. The remaining sections of this chapter describe assessment evaluation practices that will respond to aspects of the applied problem.

PART OF THE SOLUTION: AN EXAMINATION OF CRITICAL EFFECTS

This attempt at a solution to the applied problem emphasizes an interventionist approach. It is based on three basic assumptions that are founded on theories of social learning and applied behavior analysis. First, the interventionist approach is based on the assumption that behavior or student performance can be described in understandable terms. Second, behavior

FIGURE 3

The Applied Problem of Increased Learning Discrepancies Between Special Pupils and Their Peers Over Time



tends to occur in regular patterns that, when assessed adequately, can be predicted. Third, both appropriate and inappropriate behaviors are acquired in the same manner.

The interventionist approach has the following characteristics: (a) student and teacher share responsibility for successful and unsuccessful learning, (b) teachers actively participate in student learning, (c) assessment is an integral component of instruction, (d) the direct measurement of student performance is the focus of teaching, (e) assessment and evaluation is centered on the immediate contexts of learning, (f) socially important behaviors and educational goals are stressed, and (g) principles of applied behavior analysis are emphasized.

Fundamentals

Before addressing assessment and evaluation practices directly, it is important that we discuss some fundamental and underlying concepts. Traditionally, assessment is linked directly to the measurement of student performance, that is, strengths and weaknesses. Effective assessment and evaluation practices, however, are grounded in a multidisciplinary team approach that enables teachers, parents, and students to communicate, be accountable, and make reliable and valid decisions. The team approach also can set the occasion for analytic thinking and problem solving, which decrease the effects of irrelevant factors contributing to poor educational decisions.

Effective assessment and evaluation practices also consider the contexts in which student performance is displayed. The effective teaching movement has documented many important instructional pinpoints that must be assessed. A summary of these contextual factors is included in Figure 4. More detailed discussion on the effective teaching research can be found in other sources (e.g., Bickel & Bickel, 1986; Good & Brophy, 1984; Wittrock, 1986).

The point of this discussion is that student assessment should be viewed as an indicator of performance under conditions of predisposing, contributing, and precipitating factors. The student comes to the learning experience with a set of predisposing factors that must be assessed, but assessed within the context of contributing and precipitating factors governed by the instructional conditions provided by the teacher. If we fail to consider the contributions

FIGURE 4

Characteristics of Effective Teaching

- Presented curriculum
- Performance feedback
- Validated instructional procedures
- Formative assessment and evaluation practices
- Emphasis on academic learning time
  - Student engaged with curriculum
  - Brisk instructional pace
  - Increase learning opportunities
  - High success rate
  - Time allocated to learning
- Training for generalized responding
- Fundamental classroom management strategies
  - Continuous monitoring
  - Predictable structure
  - Sound pacing and scheduling
  - Communication of academic and social expectations for achievement
  - Safe, orderly, and academically focused work environment

of the whole range of factors on student learning, we are not being efficient in our attack on the applied problem.

Assessment and Evaluation Practices: An Interventionist Perspective

When culturally different students are assessed because their behaviors deviate from their "normal" peer group, reliable assessment and evaluation practices must be used. In general, four basic levels of assessment may be described: (a) archival, or previous observations, reports, and data on past performance; (b) verbal report, or interviews with the student and others who are familiar with the student; (c) standardized/norm-referenced testing, or contrived statistically based contexts to which the student responds, with student performance subsequently being compared to a norm group; and (d) direct observation, or observing the student in natural contexts. Of these four, the first three will not be discussed because they contribute relatively little to first order, or behavior, change. Direct observation procedures produce information about current levels of functioning, are not as vulnerable to reporting biases, and are not limited by the contexts of standardized testing formats.

The following discussion addresses basic guidelines for assessment and evaluation from an interventionist perspective. More detailed descriptions of specific direct observation techniques can be obtained from other sources (e.g., Alberto & Troutman, 1986; Wolery, Bailey, & Sugai, in press; Kerr & Nelson, 1983). Two basic questions are addressed here: Is there a problem? What is the nature of the problem?

Is There a Problem?

Determining whether there is a problem is one of the most important decisions that teachers and parents must make. An answer to this question can have a significant influence on the student's future educational experiences. The observation that a student is not learning is

sufficient to suggest that a problem exists; however, the real question is whether special instructional modifications are required, that is, is special education needed? To answer this question, the relative contribution of extraneous factors must be determined. In the case of the student who is culturally predisposed to be different (e.g., family, values), failure to succeed may be associated with nonhandicapping conditions. It is particularly important that nonbiased practices be employed.

Identifying *who* views the situation as troublesome is useful in determining the severity of the problem and, ultimately, whether special education is required. Generally, teachers and school building administrators indicate that a problem exists; however, it is not uncommon for parents and students to pinpoint difficulties and request assistance. If special education is being considered, several independent referrals should be received, or independent validation of the initial indication should be conducted. Although many questions can be asked to verify the existence of a problem, the following represents a sample of the kinds of questions that should be asked:

1. Have several independent referrals been made?
2. How is the problem operationalized or defined?
3. Is the behavior functionally different from some comparison or standard, for example, peer group?
4. Have there been dramatic changes in the individual's behavior in relatively short periods of time?
5. Have there been any significant life events in the student's or family's recent history?
6. Does the behavior interfere with the student's academic progress? Peer or adult relations? Community functioning?
7. Is the behavior destructive of property or injurious to other people?

This problem identification stage provides an excellent opportunity to conduct prereferral interventions. The prereferral intervention model is a consultation variation to service delivery (Graden, Casey, & Bonstrom, 1983; 1985; Graden, Casey, & Christenson, 1985). The emphasis is placed on the identification and definition of the student's presenting problem and, if necessary, the development and implementation of possible interventions before the actual student referral for special services. The prereferral intervention approach has evolved from concern for the increasing number of special education referrals. Algozzine, Christenson, and Ysseldyke (1982) and Sevick and Ysseldyke (1986) estimated that approximately 90% of the school age children who are considered for special education are evaluated formally. About three-quarters of that number are labeled and receive special services.

The advantages of the prereferral intervention model for the culturally different student who displays emotional or behavioral problems are numerous. First, regular education teachers are given a level of assistance that enables them to keep the student in the mainstream and to avoid creating a "pull-out" situation. Second, the likelihood of inappropriate and/or highly segregated placements can be reduced. Third, the quality of the educational programming available in the general education setting can be enhanced. Fourth, the focus of educational interventions is retained in the regular education classroom or setting. Finally, the cooperative relationship between regular and special education is reinforced.

What is the Nature of the Problem?

If there is confirmation that a problem exists, the character of the problem should be determined. This step requires a determination of possible testable explanations or hypotheses. A systematic examination of these testable explanations follows to ascertain the functional nature of the relationship between the behavior and other precipitating, predisposing, and contributing factors.

Functional Analysis and Functional Relationships. One of the most useful assessment procedures is the functional analysis (Bijou, Peterson, Harris, Allen, & Johnston, 1969;

Skinner, 1953). It enables teachers to analyze the nature of a problem in an objective and unbiased fashion by emphasizing direct observation under prevailing response conditions. Teachers who conduct a functional analysis measure (a) student behavior, (b) teacher behavior, and (c) setting or contextual conditions.

A functional analysis is simple to execute. The observer divides a piece of paper into three columns and labels them "antecedents," "behaviors," and "consequences" (see Figure 5). After noting the setting conditions in which the observation is being completed, the observer notes each behavior displayed by the target student. Any events that precede (antecedents) or follow (consequences) a given behavior are also noted. Sequences or chains of events and behaviors can be highlighted by placing a check in the appropriate column.

After completing the functional analysis observation, recurring behaviors, antecedents, and consequences are examined. Hypotheses are generated that describe the relationship between the behaviors and preceding or following events. These hypotheses are called "testable explanations," and are defined as specific statements about possible functional relationships between two variables. Some examples of testable explanations follow:

- "Whenever the teacher has a transition between lessons that exceeds 5 minutes, the number of talkouts emitted by Julio increases threefold."
- "If Cleo sits next to Caesar during English class, Caesar finishes half the number of assignments he normally completes."
- "Kiam turns away and does not interact with others when she is corrected publicly for making an error during oral reading."

It is important to note that in each of these testable explanations both variables (i.e., student behavior and antecedent/consequence events) are described in terms that can be observed and validated by another person. This degree of specificity enables an objective and systematic implementation of possible manipulations to test the integrity of the testable explanation. Statements that do not contain manipulatable components are called "explanatory fictions"; for example, "Whenever Gordie is hyperactive, he talks back to the teacher," or "Cleo fails to make friends because of her home situation." In these examples, "hyperactivity" and "home situation" are not described in observable terms and are not manipulatable or testable.

If the manipulation of components from a testable explanation produces consistent and predictable changes in the student's targeted behaviors, the testable explanation is said to be a statement of a "functional relationship." A functional relationship describes the nature of the problem and gives the teacher a starting point for the development of possible interventions. When working with culturally different students who display disordered behavior, our job as teachers is to change nonadaptive functional relationships and replace them with more adaptive ones. If the difference is cultural in nature, students must be taught a larger repertoire of skills to increase their opportunities for success without sacrificing individual differences.

Empirical and Social Validity. When a problem has been identified and its characteristics delineated, teachers must validate it both empirically and socially. Empirical validation refers to the systematic testing of the relationship between the student's problem behaviors and the contextual conditions that are associated with it. Empirical validation requires that the teacher collect direct observational data on the occurrence of the problem behavior under a variety of preplanned conditions. If the behavior changes only when the conditions are manipulated, and if other confounding factors can be accounted for, the stronger the validation. When teachers can predict the behavior change under different conditions, then a sound functional relationship has been described. For example, Kiam's teacher can change the error correction procedure so that it is not public. If Kiam subsequently interacts more and turns away less, the functional relationship is confirmed. If the public error correction procedure is reinstated, and the problem behaviors recur, the teacher has further evidence as to the empirical validity of the functional relationship statement.

FIGURE 5

Functional Analysis Format

FUNCTIONAL ANALYSIS

Observer _____
Student _____
Date _____

Setting Characteristics:

Time	*Antecedents*	*Behaviors*	*Consequences*

Empirical validation is useful, but if the functional relationship is not viewed as a problem by relevant others, it may not require special attention. An examination of social validation enables teachers to obtain more subjective information about the nature of the problem. Two basic forms of social validation data can be obtained (Kazdin, 1977). Subjective evaluation information is collected from the student and/or relevant others who are familiar with the student, for example, parents, other teachers, school building staff. This information is obtained through simple interview procedures. The second form of social validation data is determined by comparing the student's behaviors to the performance of his or her peers. In the case of the culturally different student, two peer group comparisons should be considered: the majority peer group and the student's culturally similar peer group.

Wolf (1978) suggested that social validation procedures examine three major instructional areas. The first is an examination of the social significance of the goals or expectations that have been established for a student. The question is whether the student's specific educational goals represent what the classroom, school, family, and community really want and value. Second, the social appropriateness of the instructional procedures available to the student must be assessed. Given that the goals are important, do the ends justify the means; that is, do teachers, students, parents, and other consumers consider the instructional procedures and treatments acceptable? The last area is an evaluation of the social importance of the changes

in the student's behavior. Teachers, parents, and the student should ask whether the student is satisfied with the degree of change observed in both desirable and undesirable outcomes.

Communicative Function of Behavior. A powerful complement to the systematic determination of functional relationships is the analysis of the communicative function of behavior (Donnellan, Mirenda, Mesaros, & Fassbender, 1984). Regardless of the kind of overt behaviors displayed by a student, the communicative intent that "motivates" student responding may be difficult to determine. Donnellan and associates suggested that there are two basic categories of behavioral function: interactive and noninteractive. Interactive functions may communicate requests, negations, or declarations/comments. Noninteractive functions include self-regulation, rehearsal, habitual, and relaxation/tension release.

It is important to consider that students with different learning histories or diverse cultural backgrounds may have different "behavioral indicators" to communicate their functional intents. When working with students, especially those who are predisposed with diverse cultures and family value systems, it is important to evaluate behaviors from within the context of their communicative function. Donnellan et al. suggested that three basic intervention approaches be considered based on the behavior observed and its inferred communicative intent: (a) teach replacement communicative responses, (b) use functionally related alternative response procedures, and (c) manipulate antecedent conditions. Assessing the communicative function of behavior will increase the teacher's ability to make objective and nonbiased assessments of the nature of a problem.

Critical Effect Principle. When examining the communicative function of a behavior, the focus is on the inferred motivation and intent that drives a behavior. Teachers working with culturally diverse students also must attend to the types of behaviors displayed and the critical effects associated with them (Neel, 1983). As we have emphasized throughout this paper, the types or forms of behavior emitted by a student are learned and culturally based. A given context or situation sets the occasion for different students to display different forms of behavior that frequently are associated with the same critical effect. For example, if Crystal is thirsty, the critical effect she attempts to achieve is to get a drink of water and satisfy her thirst. Crystal can achieve this critical effect in classroom settings in a number of ways: (a) raise her hand and ask for permission to get a drink, (b) not raise her hand and say that she is thirsty, (c) demand that another person bring her a glass of water, (d) be noncompliant or aggressive toward another person, earn a trip to the office, and get a drink on the way...and the list goes on. Which behavior she actually displays will be directed by her learning and cultural history. The situation is further compounded by the same behavioral forms being used to create different critical effects. For example, Crystal also uses noncompliance to avoid working on math problems, and she asks permission to get a drink in order to visit her locker.

The critical effect concept is important to the objective and accurate assessment of student behavior and the development of appropriate intervention strategies. Teachers must remember that behavioral forms and critical effects will vary with setting and contextual conditions. The traditional practice of looking at a student's behavior in isolation from the environmental or predisposing conditions increases the likelihood of intervention error and biased referral and placement decisions. When assessing behavioral forms and critical effects, the following types of questions should be considered:

1. What are the behavior forms that are in the student's repertoire?
2. What are the critical effects that are associated with these forms?
3. What are the critical effect requirements of the less restrictive or natural environment of the individual student?
4. What are the form expectations of the less restrictive environment that are required to achieve these critical effects?
5. What contexts (setting events) predict a given form/critical effect functional relationship?
6. What type of student learning/performance problem exists?

CONCLUSION

The purpose of this chapter was to develop a context for working with culturally diverse students who display behavioral problems. In this discussion, an attempt was made to describe how cultural diversity affects educational decision making and to describe a sampling of educational assessment and evaluation strategies that can reduce the bias associated with more traditional assessment practices. This paper was developed on the premise that teachers are valid and appropriate professionals to be engaged in the assessment and evaluation of student performance. It was recommended that the use of psychometrically based, indirect assessment procedures be replaced by curriculum-based practices that focus on the educational process rather than on student performance only.

When teaching the culturally diverse student, teachers should be systematic and objective when attempting to identify and examine the nature of a problem behavior or situation. A prereferral approach to problem identification was described as a possible structure for increasing cooperative and efficient problem solving. The focus of this discussion was on direct observation assessment methods, including functional analysis, empirical and social validation, communicative function of behavior, and behavioral forms and critical effects.

Although the intent of this paper was to describe these assessment and evaluation principles, a more important purpose was to emphasize that schools must acknowledge and understand how cultural diversity provides a context for academic and social behavior learning and change. For some minority groups the influence of culture can decrease access to the academic and social success that is governed and evaluated by the norms and values of the dominant culture. The greater the difference, the more difficult access will be and the greater the probability of referral for alternative educational experiences. Objective assessment and evaluation practices were stressed to decrease the influence of irrelevant factors or biases on sound educational decision making.

REFERENCES

Alberto, P. A., & Troutman, A. C. (1986). *Applied behavior analysis for teachers* (2nd ed.). Columbus, OH: Merrill.

Algozzine, B., Christenson, S., & Ysseldyke, J. E. (1982). Probabilities associated with the referral to placement process. *Teacher Education and Special Education, 5*, 19–23.

Bickel, W. E., & Bickel, D. D. (1986). Effective schools, classrooms, and instruction: Implications for education. *Exceptional Children, 52*, 489–500.

Bijou, S. W., Peterson, R. F., Harris, F. R., Allen, K. E., & Johnston, M. S. (1969). Methodology for experimental studies of young children in natural settings. *Psychological Record, 1*, 174–191.

Brantlinger, E. A., & Guskin, S. L. (1985). Implications of social and cultural differences for special education with specific recommendations. *Focus on Exceptional Children, 18*, 1–12.

Chinn, P. C., & McCormick, L. (1986). Cultural diversity and exceptionality. In N. G. Haring & L. McCormick (Eds.), *Exceptional children and youth* (4th ed.) (pp. 95–117). Columbus, OH: Merrill.

Donnellan, A. M., Mirenda, P. L., Mesaros, R. A., & Fassbender, L. L. (1984). Analyzing the communicative functions of aberrant behavior. *Journal of the Association for the Severely Handicapped, 9*, 201–212.

Gerber, M. M., & Semmel, M. I. (1984). Teacher as imperfect test. *Educational Psychologist, 19*, 137–148.

Good, T. L., & Brophy, J. E. (1984). *Looking in classrooms* (3rd ed.). NY: Harper & Row.

Gollnick, D. M., & Chinn, P. C. (1986). *Multicultural education in a pluralistic society* (2nd ed.). Columbus, OH: Merrill.

Graden, J. L., Casey, A., & Bonstrom, O. (1983). *Prereferral interventions: Effects on referral rates and teacher attitudes*. (Research report number: 140). Minneapolis, MN: Institute for Research on Learning Disabilities.

Graden, J. L., Casey, A., & Bonstrom, O. (1985). Implementing a prereferral intervention system: Part II. The data. *Exceptional Children, 51*, 487–496.

Graden, J. L., Casey, A., & Christenson, S. L. (1985). Implementing a prereferral intervention system: Part I. The model. *Exceptional Children, 51*, 377–384.

Grosenick, J. K., & Huntze, S. L. (1980). *National needs analysis in behavior disorders: Severe behavior disorders*. Columbia, MO: University of Missouri, Department of Special Education.

Kauffman, J. M. (1985). *Characteristics of children's behavior disorders* (3rd ed.). Columbus, OH: Merrill.

Kazdin, A. E. (1977). Assessing the clinical or applied importance of behavior change through social validation. *Behavior Modification, 4*, 427–452.

Kerr, M. M., & Nelson, C. M. (1983). *Strategies for managing behavior problems in the classroom*. Columbus, OH: Merrill.

Lily, M. S. (1986). The relationship between general and special education: A new face on an old issue. *Counterpoint, 6*, 10.

Neel, R. S. (1983). *Teaching autistic children: A functional curriculum approach*. Seattle, WA: University of Washington.

Ogbu, J. U. (1985). Research currents: Cultural-ecological influences on minority school learning. *Language Arts, 62*, 860–869.

Paul, J. L. (1985). Where are we in the education of emotionally disturbed children? *Behavioral Disorders, 10*, 145–151.

Schultz, E. W., Hirshoren, A., Manton, A. B., & Henderson, R. A. (1971). Special education for the emotionally disturbed. *Exceptional Children, 38*, 313–319.

Skinner, B. F. (1953). *Science and human behavior*. New York: Macmillan.

Sevick, B. M., & Ysseldyke, J. E. (1986). An analysis of teacher's prereferral interventions for students exhibiting behavioral problems. *Behavioral Disorders, 11*, 109–117.

U.S. Department of Education (1986). *Eighth Annual Report to Congress on the Implementation of the Education of the Handicapped Act*. Washington, DC: Author.

Wang, M. C., Reynolds, M. C., & Walberg, H. J. (1986). Rethinking special education. *Educational Leadership, 44*, 26–31.

Will, M. (1986). *Educating students with learning problems: A shared responsibility*. Washington, DC: U.S. Department of Education, Office of Special Education and Rehabilitative Services.

Wittrock, M. C. (Ed.) (1986). *Handbook of research on teaching* (3rd ed.). New York: Macmillan.

Wolery, M., Bailey, D., & Sugai, G. (in press). *Effective teaching: Principles and procedures of applied behavior analysis with exceptional children*. Boston, MA: Allyn & Bacon.

Wolf, M. M. (1978). Social validity: The case for subjective measurement, or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11*, 203–214.